

## Title page, Content, etc.

権利	Copyrights 日本貿易振興機構（ジェトロ）アジア 経済研究所 <a href="http://www.ide.go.jp">http://www.ide.go.jp</a>
journal or publication title	Industrial Agglomeration : Facts and Lessons for Developing Countries
year	2003
URL	<a href="http://hdl.handle.net/2344/00014839">http://hdl.handle.net/2344/00014839</a>

# INDUSTRIAL AGGLOMERATION: FACTS AND LESSONS FOR DEVELOPING COUNTRIES

Edited by  
Mitsuhiko Kagami  
Masatsugu Tsuji

Institute of Developing Economies  
Japan External Trade Organization

**INDUSTRIAL AGGLOMERATION:  
FACTS AND LESSONS  
FOR DEVELOPING COUNTRIES**

Edited by

Mitsuhiro Kagami  
Masatsugu Tsuji

**Institute of Developing Economies**  
Japan External Trade Organization

Published by:

Institute of Developing Economies (IDE), JETRO

3-2-2 Wakaba, Mihama-ku, Chiba-shi

Chiba 261-8545, Japan

Fax: +81-43-299-9763

©2003 Institute of Developing Economies (IDE), JETRO

All rights reserved. No part of this publication may be reproduced, stored in a retrieval system, or transmitted, in any form or by any means, electronic, mechanical, photocopying, recording or otherwise, without the prior permission of the Institute of Developing Economies (IDE), JETRO.

IDE International Joint Research Project Series No. 7

ISBN 4-258-56007-3 C3333

The opinions expressed in this publication are the responsibility of the authors and not of their organizations.

Printed in Japan by Aiko Printing Co., Ltd.



# CONTENTS

Preface .....	iii
List of Authors .....	v
INTRODUCTION .....	xi
Mitsuhiro Kagami and Masatsugu Tsuji	
PART I JAPAN TEAM	
1 Summary of the Japan Team .....	1
Masatsugu Tsuji	
2 The Relationship between Toyota Motor Corporation and Its Parts Suppliers in the Age of Information and Globalization: Concentration vs. Dispersion .....	19
Masatsugu Tsuji	
1. Introduction .....	19
2. Production System of the Automobile Industry .....	20
3. Production Structure of Toyota .....	23
4. Hierarchical System vs. Non-Hierarchical System .....	25
5. Localization of the Automobile Industry in Aichi Prefecture .....	28
6. Toyota Parts Suppliers Facing Globalization .....	33
7. Conclusion .....	37
Notes .....	40
References .....	41
3 Iron Town Cluster: Yawata, Its Glory, Decline and Rebirth .....	42
Mitsuhiro Kagami	
1. Introduction .....	42
2. Kitakyushu City: Heavy Industry Cluster .....	43
3. History of Yawata Works .....	48
4. Revival of the City .....	60
5. Comparisons and New Directions .....	63
6. Concluding Remarks .....	66
Notes .....	68
References .....	69

4	Information Technology and Economic Growth: Discovering the Informational Role of Density .....	70
	Takuo Imagawa	
	1. Introduction .....	70
	2. Two Paradoxes under the IT Revolution .....	72
	3. Increasing Role of Density under the Knowledge Economy .....	77
	4. IT and Information Spillovers .....	89
	5. Discussions .....	98
	Notes .....	99
	References .....	101
5	Recovery of Clusters in the Kansai Area: A Case Study of Shinsaibashi and Higashi Osaka .....	103
	Masashi Ueda	
	1. Introduction .....	103
	2. Why Shinsaibashi and Higashi Osaka? .....	104
	3. History of the Two Districts .....	107
	4. ICT Revolution and the Kansai Area .....	108
	5. New Activities in Two Districts .....	110
	6. Conclusion .....	115
	Notes .....	116
	References .....	116
6	Agglomeration of Exporting Firms in Industrial Zones in Northern Vietnam: Players and Institutions .....	118
	Akifumi Kuchiki	
	1. Introduction .....	118
	2. A Theoretical Model .....	120
	3. Development of IZs by the Quasi-Public Sector .....	123
	4. Development of IZs by the Private Sector .....	131
	5. IZ Development by Quasi-Public/Private Sectors in Vietnam .....	134
	6. Cases of Industrial Zones in Northern Vietnam .....	137
	7. Summary and Conclusions .....	149
	References .....	152
7	Industrial Agglomeration and Regional Growth in Korea: Focusing on the Software and ICT Service Sector .....	154
	Yasushi Ueki	
	1. Introduction .....	154

2. Industrial Organization and the ICT Industry .....	156
3. Growth Factors of Knowledge-based Industries .....	159
4. Industrial Agglomeration and Regional Growth .....	164
5. Characteristics of the ICT Sector .....	168
6. Concluding Remarks .....	175
Notes .....	176
References .....	177
 8 Industrial Exchanges between Clusters across Countries .....	179
Yasunari Miyauchi	
1. Introduction .....	179
2. Case Study of Textile Production Areas in Fukui and Lyon .....	180
3. Conclusion .....	201
References .....	202
 9 China's Regional Industrial Disparity from the Viewpoint of Industrial Agglomeration .....	203
Koichiro Kimura	
1. Introduction .....	203
2. Change of Regional Industrial Disparity .....	205
3. Industrial Agglomeration in the Eastern Area .....	213
4. The Western Development .....	225
5. Concluding Remarks .....	228
Notes .....	229
References .....	231
 PART II ITALY TEAM	
10 Summary of the Italy Team .....	235
Luca De Benedictis, Emanuele Giovannetti, Roberta Rabellotti, Enrico Santarelli and Giancarlo Spagnolo	
 11 Three Decades of Italian Comparative Advantages .....	244
Luca De Benedictis	
1. Introduction .....	244
2. Measuring Comparative Advantages .....	245
3. Scatter Plots .....	246
4. Kernel Density .....	251
5. Some Theoretical Explanations .....	253
6. Industrial Districts and Persistence .....	255



7. Conclusions .....	258
Notes .....	258
References .....	261
 12 Globalization, Industrial Districts and Value Chains .....	264
Roberta Rabellotti	
1. Introduction .....	264
2. Industrial Districts and Value Chains .....	266
3. The Brenta Shoe District .....	267
4. The Markets .....	269
5. The Top Brand Chain .....	270
6. Brenta in the Top Brand Chain .....	271
7. Local Governance in Brenta .....	277
8. Conclusions .....	280
Notes .....	282
References .....	284
 13 The Competitive Advantage of a Region: Industrial Districts in Emilia-Romagna .....	286
Enrico Santarelli	
1. Introduction .....	286
2. Alternative Landscapes: A Comparison of Six Different Maps of Industrial Districts .....	288
3. Technological Change and Economic Performance in the Industrial District: Evidence from Case Studies .....	292
4. Technological Change in the Industrial District: An Econometric Analysis .....	298
5. Concluding Remarks .....	304
Notes .....	305
References .....	306
 14 Agglomeration in the Internet: Does Space Still Matter? The MIX-IXP Case .....	309
Emanuele Giovannetti, Karsten Neuhoff, and Giancarlo Spagnolo	
1. Introduction: Agglomeration .....	309
2. Proximity in Cyberspace: Death of the Distance? .....	311
3. "Relational Governance" as a Centripetal Force for Districts .....	314
4. The Internet .....	317

5. The Peering Decision .....	320
6. Agglomeration in Peering? .....	322
7. Empirical Analysis .....	323
8. Conclusions .....	327
Notes .....	328
References .....	329
 PART III US TEAM	
15 Summary of the US Team .....	333
Andrew Schrank	
16 The Software Industry in North America: Human Capital, International Migration, and Foreign Trade .....	341
Andrew Schrank	
1. Introduction .....	341
2. The North American Software Industry: Centrifugal Forces .....	343
3. The North American Software Industry: Centripetal Forces .....	351
4. Data Analysis .....	352
5. Discussion .....	359
Notes .....	360
References .....	361
17 Mexico: The Management Revolution and the Emergence of the Software Industry .....	365
Clemente Ruiz-Durán	
1. Introduction .....	365
2. I Wonder How, I Wonder Why? Driving Forces in Mexico Software Industry .....	368
3. First Movers in the IT Revolution .....	373
4. With a Little Help from My Friends: Dialogue and Agglomeration Experience .....	380
5. The Next Step: The Platform for Internet Operations .....	399
Notes .....	400
References .....	401
CONCLUSION .....	404
Mitsuhiro Kagami and Masatsugu Tsuji	
INDEX .....	410